

Stakeholders Workshop

Bridges and Barriers to Public Participation

Monday, April 20, 2015

Sofia, Bulgaria

Location: Hotel “Arena di Serdica”, Arena Conference Hall

Agenda

8.30 - 9.00 Registration

9:00 – 9.15 Welcome and Introduction

Welcome words by Prof. Svetoslav Simeonov – Director of the National Institute of Geophysics, Geodesy and Geography – Bulgarian Academy of Sciences (NIGGG-BAS).

09.15 - 11.00 Session 1: Perspectives towards enhanced Integrated Water Resources Management

Subtitle: *Bulgarian Stakeholders Implication in Integrated Water Management Process*

Facilitator: Prof. Mariyana Nikolova

Presentations:

9.15 A Geographical Water Resources Information System as an Essential Element of the Integrated Water Resources Management - Assoc. Prof. Vania Ioncheva (National Institute of Meteorology & Hydrology, BAS) [abstract – page 6; author – page 9]

9.45 The Role of the National Association of Water Professionals as Leverage for Water Sector Sustainable Development - Albena Vatrlova (Bulgarian Water Association) [abstract – page 6; author – page 9]

10.15 Restoration of Dragoman marsh and Aldomirovtsi marsh in Bulgaria - Andrey Ralev (Balkani Wildlife Society) [abstract – page 7; author – page 10]

10.45 The water crisis in Arid West – governance and policy issues - Ed Curley (Pima County Regional Wastewater Reclamation Department, WESTCAS) [abstract – page 7; author – page 10]

11.15 – 11.45 Coffee Break (in front of Arena Conference Hall)

11.45 – 13.00 Session 2: Managing ecosystems and their services

Subtitle: Applications of the ecosystem services approach in Integrated Water Resource Management

Facilitator: Assoc. Prof. Stoyan Nedkov

Presentations:

11.45 Methodological framework for the assessment of Ecosystem Services in Bulgaria and its relation to water management - Dr. Svetla Doncheva (Institute of Biodiversity and Ecosystem Research, BAS) [abstract – page 7; author – page 11]

12.15 Ecosystem services approach for water management: a soft path - Prof. Francesc La Roca (University of Valencia) [abstract – page 8; author – page 11]

12.45 Sessions discussion

13.00 – 14.00 Lunch Break (Hotel Restaurant & Garden "La Tribuna")

14.00 – 15.30 Session3: Gaining opportunities

Subtitle: What do Stakeholders need from a "Transatlantic Dialogue" and how can this be organized?

Facilitator: Prof. Chad Staddon

Presentation of SWAN Engagement Survey results - Chad Staddon / Lorraine De Souza

Round Table Discussion: *Academia - seeking for pole position in the participatory process*

Analysis and discussion on the results from the Stakeholders' Survey "Engagement with Stakeholders in Support of a Transatlantic Dialogue"

15.30 – 16.00 Coffee Break (in front of Arena Conference Hall)

16.00 – 16.30 Continuation of the discussion

16.30 – 17.00 Presentation: ASCOR (Arsenic contamination of Ogosta River): Linking biogeochemical processes in floodplain soils with river system dynamics – benefits for the local communities - Assoc. Prof. Tsvetan Kotsev (NIGGG-BAS) [abstract – page 8; author – page 12]

17.00 End of the stakeholders' workshop

17.00 – 18.00 Free time

18.00 Cocktail (in front of Arena Conference Hall)

Stakeholders List

Vania ioncheva (*National Institute of Meteorology & Hydrology, BAS*)

Albena Vatrlova (*Bulgarian Water Association*)

Andrey Ralev, Marta Dimitrova (*Balkani Wildlife Society*)

Svetla Doncheva (*Institute of Biodiversity and Ecosystem Research, BAS*)

Tsvetan Kotsev (*NIGGG-BAS*)

Francesc La- Roca (*University of Valencia*)

Ed Curley (*Pima County Regional Wastewater Reclamation Department, WESTCAS*)

DESCRIPTION OF THE SESSIONS

Background information:

The workshop is a part of a series of stakeholders seminars conducted within SWAN project. The purpose is to find out how stakeholders interaction with the Academia can develop a new network of mutual interest for both sides. The participants represent different stakeholder groups. The choice of the stakeholders was based on their expertise and previous interactions with SWAN partners and ensures a balance between different representatives – governmental authorities, private companies, NGOs and Academia.

1st morning session (9.15)

Perspectives *towards* enhanced Integrated Water Resource Management (IWRM)

Subtitle: Bulgarian Stakeholders Implication in Integrated Water Management process

Facilitator: Prof. Mariyana Nikolova

2-nd morning session (11.30)

Managing ecosystems and their services

Subtitle: Applications of the ecosystem services approach in integrated water resource management

Facilitator: Assoc. Prof. Stoyan Nedkov

Objectives of the morning sessions:

- ✓ To share and exchange experience in the fields of participatory process in the IWRM and ecosystem services approach applications at local and international level;
- ✓ To generate new perspectives for long-term collaboration in science and innovations;
- ✓ To provide feedback from the stakeholders about their expectations from the SWAN “network”;
- ✓ To continue, enhance, and expand the collaboration with the Stakeholders;
- ✓ To improve the efficiency and effectiveness of the communication with the stakeholders

The main focus of the first morning session will be on the Integrated Water Resources Management approach considered from different perspectives - Academia, NGO-s and private sector. Applications supporting IWRM process will be presented and discussed. There will be also a focus on the obstacles and challenges in the participatory process regarding IWRM, based on the experience of the NGO-s and private sector.

The focus of the 2nd morning session will be on the applications of the ecosystem services approach in Integrated Water Resources Management. The opportunities for adopting more widely the ES approach in water policy and management will be considered and discussed.

Concluding remarks from the facilitator, summary of the main outputs from the session with emphasizes on the long-term collaboration (depends on the direction of the discussion & on the facilitator strategy).

Afternoon session (14.00): **Gaining opportunities**

Facilitator: Prof. Chad Staddon

Focus on the constraints and opportunities of the participatory process between the Academia and non-academics. The goal is to bring together the approaches for problem solving. The stakeholders could be asked to give a list of some topics they are interested in to be developed by the Academia.

Objectives of the afternoon session:

- ✓ To discuss the results from the Survey on “Engagement with Stakeholders in Support of a Transatlantic Dialogue”;

- ✓ To draw a feedback from the stakeholders on the necessary actions from the Academia how to interact adequately with them;
- ✓ To provide a vision for long-term collaboration development;
- ✓ To provide the local insight for the perception of stakeholders engagement process;
- ✓ To discuss the mechanisms to mediate the stakeholders engagement;
- ✓ Find out the key questions that stakeholders would want to see investigated.

Round Table Discussion:

Academia - seeking for pole position in the participatory process

The UWE team prepared a Survey, which will be provided in advance to the participants and stakeholders to fill it up. The results will be analyzed before the Stakeholders' workshop and will be presented, and discussed in this session. The aim is to decide HOW we might go ahead.

Information about the Survey:

The aims of the survey are threefold:

- To continue filling out the list of potential non-academic stakeholders in “sustainable water” across Europe;
- To learn about stakeholders' experience in working with academics;
- To learn some more top tips for constructing the next phase of the “Transatlantic dialogue”: what might the stakeholders tell us about how we should proceed.

A summary from the Facilitator about the stakeholders' input to the development of the “Transatlantic dialogue” (drawbacks & perspectives).

16.30 Presentation: ASCOR (Arsenic contamination of Ogosta River) project: Linking biogeochemical processes in floodplain soils with river system dynamics – benefits for the local communities - Assoc. Prof. Tsvetan Kotsev, NIGGG.

The presentation aims to share the experience of an interdisciplinary project and its engagement with the local communities on the issues related to an arsenic contamination.

PRESENTATIONS: TITLES & ABSTRACTS

A Geographical Water Resources Information System as an Essential Element of the Integrated Water Resources Management

by Vania Ioncheva (National Institute of Meteorology and Hydrology, Bulgarian Academy of Sciences)

e-mail: vania_ioncheva@dir.bg

Abstract. Integrated Water Resources Management (IWRM) is a complex procedure covering various spatial scales and various fields of expertise. It requires flexible, well formatted and structured geographical base of primary data for the watersheds of major rivers in Bulgaria, which includes all the general groups of data presented in layers, with opportunities for creation of different thematic maps or performing spatial analysis, depending on the purpose of the study. The presentation includes all layers developed within the information system “**GeoWateRIAS**” and groups of projects related to the water infrastructure in the catchment area of Yantra river basin. Some models for further processing of the primary data are presented, as a part of the developed system - hydrological model “precipitation-runoff” simulation of natural flow in different points of the river network of the basin.

The Role of the National Association of Water Professionals as Leverage for Water Sector Sustainable Development– the BWA example

by Albenav Vatrlova (Bulgarian Water Association)

e-mail: albenav@bas.bg ; albenav@mail.bg

Abstract. An overview of the mission, structure and activities of the Bulgarian Water Association is done together with its national and international partnerships with governmental, regulatory and academic institutions, non-government organizations and private sector. The Association’s key role is presented in exchanging professional knowledge and experience as well as delivering expertise, education and training for the achievement of sustainable water sector development. Examples are given on national and EU projects with the BWA core participation.

Restoration of Dragoman marsh and Aldomirovtsi marsh in Bulgaria

by Andrey Ralev (Balkani Wildlife Society)

e-mail: aralev@balkani.org

Abstract: A story of the two karst marshes in Bulgaria destroyed in the past. After restoration activities they are now the biggest karst marshes in Bulgaria and they are wetlands of international importance. Dragoman Marsh Karst Complex is a wetland of international importance (Ramsar site) declared in 2012. It includes the last conserved karst marshes in Bulgaria and one of the few on the Balkan Peninsula – Dragoman and Aldomirovtsi Marshes, wet meadows and some smaller wetlands. Dragoman marsh is the biggest limestone marsh in Bulgaria - now its area covers about 400 ha. Aldomirovtsi Marsh (120 ha) is linked to it through subterranean waters and was declared a protected area in 1989. The Protected area of Aldomirovtsi Marsh has the same history but it disappeared in the late 80s of the 20th century, possibly due to military maneuvers affecting the karst. Currently it is recovered and a lot of rare birds started nesting there.

The water crisis in Arid West – governance and policy issues

by Ed Curley (Pima County Regional Wastewater Reclamation Department, WESTCAS)

e-mail: ed.curley@cox.net

Abstract: The presentation will briefly discuss the current crisis in water and wastewater supply/demand in the Arid West with a focus on governance and policy issues. These includes the extreme drought in California and the West and the new water-rationing mandate in California which will result in dramatic changes in lifestyles, business, agriculture and the entire Western economy. This water crisis is now rapidly spreading to the rest of the West. The briefing will finish with a summary of the current wisdom, and will present some radical alternatives for mitigating or adapting to this crisis.

Methodological framework for the assessment of Ecosystem Services in Bulgaria and its relation to water management

by Svetla Doncheva (Institute of Biodiversity & Ecosystem Research - Bulgarian Academy of Sciences)

e-mail: sbrat@abv.bg

Abstract: The national methodological framework on mapping and assessment of ecosystem services aims at streamlining the national ecosystems and ecosystem mapping and biophysical assessment process in Bulgaria. It is directed to three main objectives: mapping of the ecosystems; assessing the state of the ecosystems; assessment of ecosystems'

potential to deliver ecosystem services. The presentation will be focused on the assessment of marine, wetlands, rivers and lakes ecosystems. The methodology provides a combination of information on relevant information sources that may be of interest to a wider circle of stakeholders, and specific guidance to assessing ecosystem status and ecosystem services. The relations to different aspects of water management at both national and local scale will be discussed.

Ecosystem services approach for water management: A soft path

by Francesc La-Roca (Universitat de València, Departament d'Economia Aplicada)

e-mail: froca@uv.es

Abstract: Since the drafting of the Millennium Ecosystems Assessment in 2005, the idea of adopting an Ecosystem Services Approach (ESA) for different environmental policy domains has gained momentum. In the water domain different proposals and experiences have been tested using this kind of approach. The presentation, based on the analyses of various methodological schemes, discusses the opportunities and challenges of adopting an ESA in the context of water management. Finally, the presentation emphasizes the advantages of qualitative and deliberative methodologies -as alternative to quantitative approaches-, as a first step to introduce the ESA in water policy, given the present state of the art.

ASCOR (Arsenic contamination of Ogosta River) project: Linking biogeochemical processes in floodplain soils with river system dynamics – benefits for the local communities

by Tsvetan Kotsev (National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences)

e-mail: tsvetankotsev@mail.bg

Abstract: The presented research project has three general objectives, which include: 1) Investigate the magnitude and spatial distribution of As contamination in the floodplains of Ogosta river (Bulgaria) using an integrated approach based on topography, hydrology, and geochemistry; 2) Improve our process understanding of As speciation and mobility in highly-contaminated, mining affected river floodplains during alternating periods of high/low flow and flooding/drainage, respectively; 3) Explore novel approaches for integrating process-oriented, molecular-scale knowledge and river-system scale information to better understand As dynamics, As fluxes, and impacts on water quality at the river-system scale. During the

construction works of the groundwater monitoring system, talks and explanations of environmental risks related with As contamination have been given to the local people in the field.

STAKEHOLDERS INFORMATION



Vania Ioncheva is an Assoc. Prof., Ph.D. in the department of Water Management in the National Institute of Meteorology and Hydrology at the Bulgarian Academy of Sciences. She graduated at the University of Architecture, Civil Engineering and Geodesy (Sofia) in Civil Hydro engineering. She received her Ph.D. degree in the field of hydrology, hydraulics and water management in the Institute of Water Problems at the Bulgarian Academy of Sciences.

Her specialization is in the field of *River* hydraulics and sediment transport. Her main fields of interest are: hydraulics of open flows - rivers and reservoirs, hydrology, sediment transport, deformation processes in natural and regulation river beds, field investigations, mathematical modeling and computer programs for determination of the geometrical parameters of stable river beds and silting in reservoirs. She also works in the fields of optimal complex and rational utilization, management, and operation of the water resources, ecological aspects of the water resources utilization, GIS and Information and Expert systems for water management – hydrological models for stream flow simulation and assessment of non-point sources of pollution.

E-mail: vania_ioncheva@dir.bg



Albena Vatalova is an individual member of the Bulgarian Water Association and key participant in many international and national projects (described in the presentation). She has Master Degrees in Water Supply and Sanitation Engineering, Economics and Management. Her present position is a Chief Assistant Professor at the Water Management Department of the National Institute of Meteorology and Hydrology – Bulgarian Academy of Sciences (NIMH-

BAS). Her professional experience includes also water treatment plants design, consultancy in water and wastewater technologies, economics and management as well as operational work in the field for international financial institutions.

Contact details: Department of Water Management and Usage, National Institute of Meteorology and Hydrology, Bulgarian Academy of Sciences (NIMH-BAS),

66 Tzarigradsko Shose Blvd., 1784 Sofia, Bulgaria

E-mail: albenav@bas.bg ; albenav@mail.bg



Andrey Ralev was born in 1979. He graduated Marketing and Management at the University of World Economy and Environmental Management at the University "Carlos III" in Madrid. One of the founders of the Coalition "Let Nature Remain in Bulgaria", an activist in a number of campaigns and projects related to rural development, sustainable use of forests, and protection of rivers. He is actively hiking, biking and rock climbing. His hobby is birdwatching.

Contact details: Balkani Wildlife Society

93 Evlogi i Hristo Georgievi Blvd, 1st floor, 1142 Sofia, Bulgaria

E-mail: aralev@balkani.org



Svetla Bratanova-Doncheva is Head of division "Ecosystem Research" in the department of "Ecosystem Research, Environmental Risk Assessment and Conservation Biology" at the Institute of Biodiversity and Ecosystem Research (Bulgarian Academy of Sciences). She is a Dipl. Eng., MSc in Environmental Protection & Forestry and has a Ph.D. degree in Ecology & Environmental Protection. She has specializations in CNRS, Montpellier, INRA – Nancy, France and Czech Republic. She is invited expert in many national and international scientific and business projects related to the environment and sustainable development, environmental legislation, environmental auditing and Environmental Impact Assessment (EIA). She has been a member of the Coordination Committee of Ministry of Environment and Water for global changes and biodiversity since 2010. Her research interests are in the fields of Ecosystem integrity, Functional Ecology, Ecosystem services, Forestry and Forest Decline, Biodiversity Assessment, Environmental Protection, Environmental Stress, Environmental Risk Assessment, EIA.

Contact details: Institute of Biodiversity and Ecosystem Research, BAS

2, Gagarin Street, 1113 Sofia, Bulgaria

E-mail: sbrat@abv.bg



Francesc La-Roca

Graduate in Economics (Universitat de Valencia). Post graduate studies at the Johannes Gutenberg Universität Mainz, Germany (1982-85). PhD in Economics at the Universitat de Valencia (1986). Post-doc research stay at the Istituto Universitario di Architettura di Venezia, Italy (1990/91). Since 1987 full Professor at the Universitat de Valencia (Department for Applied Economics).

Within the general framework of Ecological Economics his research activities during the past two decades have dealt with questions related to social and economic aspects of the environmental crisis, with a special focus on water policy and on socio-economic technology assessment. Under the frame of the European Jean Monnet Action, he currently teaches two modules, on *The Environmental Policy of the EU* and on *The Landscapes of the European Integration and Environmental Policies*, respectively.

At present, he is a member of the Foundation for a New Water Culture and Coordinator of the Foundation's Observatory of Water Public Policies. Furthermore he participates in different Spanish research networks, among others the Spanish Network of Ecological Economics and the Sociology, Environment and Society Network.

Contact details: *Universitat de València. Departament d'Economia Aplicada*

E-mail: froca@uv.es



Ed Curley

A graduate of the University of Arizona, Ed Curley was employed by the Pima County Regional Wastewater Reclamation Department (RWRD) for over 33 years. Recently retired from his former position as Strategic Planning Manager, he currently assists the Department on a part-time basis working with the jurisdictions and tribal entities that RWRD serves and with special projects for the Director's Office.

His previous assignments have included the development of the 2006 Metropolitan Facility Plan Update and of the current 20-year \$1.4 billion Capital Improvement Plan for the Department. From 1995 – 2007, Mr. Curley served as Project Director of the Arid West Water Quality Research Project (AWWQRP), an EPA-sponsored assistance grant administered by the Department which produced a series of major technical and policy papers on the science and policy aspects of water quality standards for arid environments.

Mr. Curley is a co-editor of Relevance of Ambient Water Quality Criteria for Ephemeral and Effluent-Dependent Watercourses of the Arid Western United States (SETAC, 2008). He is President of the Board of Directors of the Western Coalition of Arid States (WESTCAS). Mr. Curley received a National Environmental Achievement Award from the Association of Metropolitan Sewage Agencies in 2002, a Metropolitan Pima Alliance “Common Ground” Award in 2005, and the WESTCAS President’s Award in 2007.

Contact details: Pima County Regional Wastewater Reclamation Department, Tucson, AZ and President, WESTCAS

E-mail: ed.curley@cox.net



Tsvetan Kotsev is an Assoc. Prof., PhD at the National Institute of Geophysics, Geodesy and Geography at the Bulgarian Academy of Sciences. Graduate in Geography and Pedagogics in Sofia University, PhD in Physical Geography and Landscape Ecology (2003). His research interests are in the fields of physical geography, landscape ecology, environmental geochemistry, arsenic and heavy metals. He has been participating and managing a range of national and international research projects.

*Contact details: National Institute of Geophysics, Geodesy and Geography, Geography Department
Acad. G.Bonchev, str., bl.3, Sofia - 1113*

E-mail: tsvetankotsev@mail.bg